Remarks

Favorable reconsideration of this application is requested in view of the following remarks. Claims 1-3, 5, 6, and 9-26 are pending, with claims 1, 3, 10, 19, 21, and 26 being independent.

Before the rejections contained in the Office Action are specifically addressed, it may be helpful to note the differences between vacuum molding and compression molding of articles. In vacuum molding, a slurry of material is used. The slurry is formed of water and a solid material and is of a consistency so that the slurry can be transported through a conduit system. Typically, the slurry is drawn through a porous screen. The screen prohibits almost all of the solid material of the slurry from passing through, but allows fluids to pass. The solid material therefore amasses on the screen to form the vacuum molded material.

Compression molding includes the use of compressive pressure as the basis for forming an object in a desired shape. There is no vacuum, slurry, or screen used in a compression molding process. Instead, a molding composition, typically including fiber and a binder, is compressed, and heat can also be applied. See generally pages 11-13 of the present application.

As stated in the declaration of David C. Lyons, one of the named inventors herein, filed with the Patent Office on April 8, 2002, Applicants are unaware of any art related to compression molding of materials for use in gas fireplace systems that predates the present application.

It is further noted that in several of the example embodiments disclosed in the present application, the term "slurry" is used to describe the molding composition after a solvent has been added. For example, one slurry is described as including fiber, a binder, and a solvent. Application, page 13, lines 7-8 and page 14, lines 22-24. Although the term "slurry" is used, it should be understood that the slurry is formed using a solvent such as water that makes up a relatively small percentage of the molding composition as compared to a vacuum molding slurry. For example, a typical slurry for compression molding disclosed herein includes water in an amount of approximately 15 to 45% by weight of total slurry. Application, page 14, line 22 - page 15, line 2, and page 16, tables 1 and 2. This is unlike a typical slurry used for vacuum molding, which, as illustrated below, can have water contents well over 50% by weight. Further, the slurry disclosed in the present application is compressed during molding to form a

compression molded material, rather than being drawn through a porous screen to coalesce solid material, as is a slurry during vacuum molding. Therefore, although the term slurry is used in the present application to describe the molding composition that includes the solvent, the term should not be confused with the more aqueous slurries used in vacuum molding techniques.

Rejection Based on Atemboski and Sinsley '725

In section 4 of the Office Action, claims 1, 2, 21, 22, 25, and 26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Atemboski et al., U.S. Patent No. 6,443,726, in view of Sinsley, U.S. Patent No. 6,361,725. This rejection is respectfully traversed.

Claim 1 is directed to a gas burner for a fireplace. Claim 1 recites, among other limitations, a burner panel comprising a compression molded material.

The rejection concedes that Atemboski fails to disclose a burner panel comprising a compression molded material.

The rejection cites column 1, lines 55-62 of Sinsley '725 as disclosing a compression injection method. This characterization of Sinsley is respectfully traversed.

It is respectfully asserted that Sinsley '725 discloses a modified vacuum molding technique, not a compression molding method. The molding process disclosed in Sinsley '725 is described generally as follows.

> The process uses a textured screen with a mold body into which a slurry of synthetic mineral wool fiber is injected under pressure and then molded under increased air pressure by driving the liquid out of the mold through a plurality of apertures. Once molded, continued air pressure partially dries the formed article to low moisture content in a shortened cycle time.

Sinsley '725, column 1, lines 56-62 (underlining added). As detailed below, there are several reasons why the above underlined portion clearly indicates that the process disclosed by Sinsley '725 is a vacuum molding process.

For example, Sinsley '725 discloses using "a slurry of synthetic mineral wool fiber." Id. The slurry is described as comprising a ratio of water to solid material of approximately 2075 to 36 (or almost 98% water by weight). Sinsley '725, column 3, lines 3-6. Such a large water to

solid material ratio is used in vacuum molding, where water including the material is forced through a porous screen to coalesce the material on the screen while allowing the water to pass through (see the general description of vacuum molding provided above). Attempting to compression mold a slurry including a water to solid material ratio of 2075 to 36 would be unsuccessful at least because the high water content would not allow the compressive forces to act on the molding composition to form an article.

In addition, Sinsley '725 describes the disclosed molding process in more detail as follows.

> An injection control valve 31 opens imparting the batch injection tank content slurry under a positive pressure range of 10-20 psi into the mold assembly 10 via a supply line 31A as best seen in FIG. 3 of the drawings, filling the mold cavity within. The injection control valve 31 is then closed and a drying control valve 32 is opened to a second source of compressed air 33. Air pressure supply to the mold assembly 10 in the range of 35 to 40 psi forces the liquid L out through the drain openings 25 within the mold base 23.
>
> The water is driven out of the mold assembly 10 leaving the ceramic fibers collected on the molding surface 17 of the synthetic mesh 16 within. The water is captured within the retainment enclosure 20 collected and returned to a recycled water storage tank 34.

Sinsley '725, column 3, lines 26-40. As the underlined portions illustrate, the process disclosed by Sinsley '725 includes forcing the slurry through the synthetic mesh 16, leaving fibers to collect on the surface 17 while allowing water from the slurry to escape. An alternative process illustrated at Figures 6-8 also involves forcing of a slurry through a screen mold. Sinsley '725, column 4, lines 35-41. Once again, these are vacuum molding techniques, albeit somewhat modified in that, instead of drawing or pulling the slurry through the mesh using vacuum pressure, the slurry is forced or pushed through the mesh. However, this does not change the fact that a slurry is being forced through a mesh to coalesce the solid material and to remove water. As noted above, in compression molding, rather than using a slurry that is passed through a screen, a molding composition is compressed under pressure (see the general description of compression molding described above).

Further, Sinsley '725 describes the final product of the process as a "coalesce log L." See, e.g., Sinsley '725, column 3, lines 45-47. The term "coalesce" means, for example, "to cause to grow together, to unit, combine" or "to grow together into lumps." The Compact Edition of the Oxford English Dictionary, Vol. 1, p. 551 (1971). These definitions for the term "coalesce" are consistent with vacuum molding, in which a slurry is forced through a screen to coalesce the solid portions of the slurry on the screen while allowing the water to pass through. Therefore, the use of the phrase "coalesce log L" in Sinsley '725 further reinforces the fact that Sinsley '725 discloses a vacuum molding process, and not a compression molded material as recited by claim 1.

In addition to the fact that Sinsley '725 fails to disclose a compression molded material, it is respectfully suggested that there is no motivation for one skilled in the art to use the process disclosed by Sinsley '725, used to make ceramic fiber construction panels, to make the burner assembly disclosed by Atemboski.

For at least these reasons, reconsideration and allowance of claim 1 and claim 2 that depends therefrom are respectfully requested.

Claim 21 is directed to a method for forming a gas burner and recites, among other limitations, forming a compression molded burner panel.

For at least the same reasons as those provided above with respect to claim 1, claim 21 and claims 22 and 25 that depend therefrom should be allowable. Reconsideration and allowance are requested.

Claim 26 is directed to a method of assembling a prefabricated fireplace and recites, among other limitations, providing a burner panel comprising a compression molded material. Claim 26 should therefore be allowable for at least the same reasons as those provided above with respect to claim 1. Reconsideration is respectfully requested.

Rejection Based on Shimek '237 and Sinsley '725

In section 5 of the Office Action, claims 10-18 were rejected under section 103(a) as being unpatentable over Shimek et al., U.S. Patent No. 5,941,237, in view of Sinsley '725. This rejection is respectfully traversed.

Claim 10 is directed to a gas burner for a fireplace. Claim 10 recites, among other limitations, a burner panel comprising a compression molded material.

The rejection concedes that Shimek '237 does not disclose a compression molded material.

For at least the same reasons as those provided above with respect to claim 1, it is respectfully submitted that Sinsley '725 also does not disclose a burner panel comprising a compression molded material, as recited by claim 10.

Reconsideration and allowance of claim 10 and claims 11-18 that depend therefrom are therefore respectfully requested.

Allowable Subject Matter

Applicants appreciate the Examiner's notification that claims 3, 5, 6, 9, 19, and 20 are allowed, and that claims 23 and 24 are allowable. All claims should be in condition for allowance for at least the reasons provided herein.

Conclusion

In light of the foregoing remarks, Applicants submit that the pending claims 1-3, 5, 6, and 9-26 are in condition for allowance. Withdrawal of the Examiner's rejections and favorable reconsideration are respectfully requested. Applicants also note that, although specific reasons for patentability have been argued herein, there may be additional reasons that the pending claims are patentably distinct from the cited references, and Applicants reserve the right to raise any such additional reasons in the future.

The Examiner is encourage to contact Applicants' undersigned attorney, at the below listed telephone number, to discuss this matter if any questions arise upon further examination of the pending claims.

Respectfully submitted,

MERCHANT & GOULD P.C.
P.O. Box 2903
Minneapolis, MN 55402-0903
Telephone: 612/332-5300

November 20, 2003
Date

Matthew A. Doscotch
Reg. No. 48,957
MAD/RAK